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REMARKS

The final Office Action dated, June 16, 2005, was carefully reviewed. The Examiner maintained the rejection of claims 1-8 under 35 U.S.C. 102(e) as being anticipated by the Claxton reference. Claims 1-8 remain in the application. It is respectfully asserted that the Claxton reference is significantly different from the present invention, as pointed out below.

The Examiner indicated the Applicants' argument, namely that Claxton downconverts all high frequency signals to an intermediate frequency, or baseband signal, and the Applicants' invention sums only desired RF signals, does not make the present invention patentable over the Claxton reference.

Perhaps the Examiner is misunderstanding the explanation of RF and IF signals. The present invention filters and processes RF analog signals, and passes only desired signals, which is less than an entire frequency band. The present invention does not teach or suggest the use of intermediate frequencies. In contrast, the Claxton reference does not teach or suggest filtering out any undesired signals (at RF stages). The Claxton reference sums all high frequency signals and downconverts to an intermediate frequency, whether the signals are desired or undesired, then further downconverts the signals to a baseband frequency. Further, Claxton does not have the capability to select which signals are summed as suggested by the Examiner in paragraph 9 of the final Office Action.

An antenna can receive many channels of RF signals at the same time, some are very strong and some are very weak. For example, in North America there are about 100 possible FM channels and about 200 possible FM channels in Europe. Using the receiver described in Claxton, should the antenna receive a very strong signal, the Claxton receiver would become useless to receive any other weaker signals. The IF processing described in Claxton would not prevent the downconverter from being overloaded by one (an undesired) strong signal.

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By receiving many undesired signals along with the desired signals, as taught by the Claxton reference, the many undesired signals may destroy the desired signals.

The independent claims 1 and 6 of the present invention require a plurality of tunable bandpass filters for filtering analog RF signals and defining multiple desired signals that are summed, digitized, and simultaneously processed. The Claxton reference does not teach or disclose a plurality of tunable bandpass filters for filtering analog RF signals as suggested by the Examiner. Further, the Claxton reference teaches combining all signals in an entire band into portions that are overlapped, it does not teach defining multiple desired signals into one summed signal as taught by the present invention. As stated above, because Claxton does not teach or disclose filtering and summing only desired signals, a single strong signal can overload the downconverter of Claxton, which is a common receiving condition for a receiver such as the one taught by the Claxton reference.

The Examiner suggested that because the Claxton reference sums both desired and undesired signals that a signal could be summed automatically, or it could be summed only when wanted or desired. However, it is respectfully asserted that this is not taught or suggested by the Claxton reference. Claxton teaches dividing an entire band into portions that are overlapped and requires mixing an intermediate frequency for each signal, which means that it only teaches summing all signals, whether those signals are desired or undesired. Claxton does not teach or suggest any means for defining multiple desired signals as taught by the Applicants' of the present invention. Furthermore, because Claxton teaches combining separate signals into a single, generally continuous composite band, it cannot possibly teach or suggest defining and summing only desired signals as taught by the present invention.

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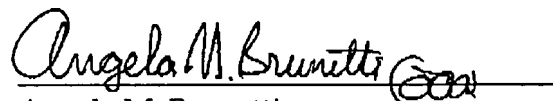
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Simply put, the present invention requires a tunable bandpass filter for filtering analog RF signals to a desired frequency signal. In the Claxton reference, the band-pass filter provides down-conversion to an intermediate frequency and then down-conversion to a baseband signal in a two-step down-conversion process. This is significantly different from the present invention. The band-pass filter in the present invention is tunable to desired signals, and there is no need for down-converters, synthesizers, mixers, frequency multipliers, and a frequency divider, as required by the Claxton reference.

It is respectfully requested that the Examiner withdraw the rejection of claims 1-8 under 35 U.S.C. 102 and that a formal Notice of Allowance be issued. Should the Examiner have any questions or comments that may place the application in better condition for allowance, he is respectfully requested to contact the undersigned attorney.

Respectfully submitted



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